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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/982,269	10/17/2001	Benoit Mory	PHFR 000110	7787
24737 7590 12/09/2005			EXAMINER	
	ELLECTUAL PROPE	STEVENS, ROBERT		
P.O. BOX 3001				•
BRIARCLIFF MANOR, NY 10510			ART UNIT	PAPER NUMBER
			2176	

DATE MAILED: 12/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)
Office Author O		09/982,269	MORY ET AL.
	Office Action Summary	Examiner	Art Unit
		Robert M. Stevens	2176
Period fo	The MAILING DATE of this communication a or Reply	appears on the cover sheet with the	ne correspondence address
WHIC - Exte after - If NC - Failt Any	IORTENED STATUTORY PERIOD FOR REF CHEVER IS LONGER, FROM THE MAILING ensions of time may be available under the provisions of 37 CFR r SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory perioure to reply within the set or extended period for reply will, by stated the reply received by the Office later than three months after the managed patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICAT 1.136(a). In no event, however, may a reply b tod will apply and will expire SIX (6) MONTHS tute, cause the application to become ABAND	ION. se timely filed from the mailing date of this communication. DNED (35 U.S.C. § 133).
Status			
1)⊠ 2a)□ 3)□	• • • • • • • • • • • • • • • • • • • •	his action is non-final. wance except for formal matters,	•
Disposit	ion of Claims		
5)□ 6)⊠ 7)□	Claim(s) 1-10 is/are pending in the application 4a) Of the above claim(s) is/are withded Claim(s) is/are allowed. Claim(s) 1-10 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and	Irawn from consideration.	
Applicat	ion Papers		
10)⊠	The specification is objected to by the Exami The drawing(s) filed on <u>08 September 2005</u> in Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the	is/are: a)⊠ accepted or b)⊡ ob he drawing(s) be held in abeyance. rection is required if the drawing(s) is	See 37 CFR 1.85(a). s objected to. See 37 CFR 1.121(d).
Priority (under 35 U.S.C. § 119		
а)	Acknowledgment is made of a claim for forei All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure See the attached detailed Office action for a li	ents have been received. ents have been received in Appli riority documents have been rec eau (PCT Rule 17.2(a)).	cation No eived in this National Stage
2) 🔲 Notic 3) 🔲 Infori	ot(s) See of References Cited (PTO-892) See of Draftsperson's Patent Drawing Review (PTO-948) See of Draftsperson's Patement(s) (PTO-1449 or PTO/SB/Cer No(s)/Mail Date	4) Interview Summ Paper No(s)/Ma 5) Notice of Inform 6) Other:	nary (PTO-413) il Date al Patent Application (PTO-152)

Application/Control Number: 09/982,269 Page 2

Art Unit: 2176

DETAILED ACTION

1. This action is responsive to communications: RCE filed 10/4/2005 to the original application filed 10/17/2001 (foreign filed 10/17/00 as EP 00402876.7) by Mory et al entitled "Binary Format for MPEG-7 Instances".

- 2. The Office withdraws all previous rejections of the claims in light of the amendment.
- 3. The Office has issued new rejections of the claims under 35 U.S.C. 103(a), in light of the amendment. See the rationale given below.
- 4. Claims 1-10 are pending. Claims 1, 3, 5-6 and 9-10 are independent.

Specification

5. Claim 1 is objected to because of the following informalities: Claim 1 reads as ... "A [sic] encoding method ...". Applicant is reminded to review the specification, including the claims and drawings and correct all minor informalities. Appropriate correction is required.

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Application/Control Number: 09/982,269 Page 3

Art Unit: 2176

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buford et al (International Application No. PCT/US97/04574, filed Mar. 17, 1997 and published as International Publication No. WO 97/34240 on Sep. 18, 1997, hereafter referred to as "Buford") in view of Simon North et al. (Sam's Teach Yourself XML in 21 Days, Sam's Publishing, Indianapolis, IN, Mar. 1999, p. 105, hereafter referred to as "North").

Regarding independent claim 1, Buford discloses:

An encoding method for encoding a description element of an instance of a markup language schema defining a hierarchical structure of description elements, said hierarchical structure comprising hierarchical levels, parent description elements and child description elements, said description element to be encoded comprising a content (p. 9 lines 17-20 and p. 11 lines 19-24), characterized in that it consists in:

providing a table ... (p. 9 lines 20-21), said table containing identification information for solely identifying each description element in a hierarchical level (p. 9 lines 19-24 and p. 11 line 19 – p. 12 line 4), and structural information for retrieving any child description element from its parent description element, (p. 12 lines 5-16)

scanning a hierarchical memory representation of said instance from parent description elements to child description elements until reaching the description element to be encoded, and retrieving the Application/Control Number: 09/982,269

Art Unit: 2176

0.170

identification information of each scanned description element, (Abstract and p. 9 lines 20-24)

Page 4

encoding said description element to be encoded as a fragment comprising said content and a sequence of the retrieved identification information. (Abstract and p. 9 lines 17-21)

However, Buford does not explicitly disclose:

... derived from said schema, ... ,

...

North, though, discloses:

... derived from said schema, ... , (p.105 "Developing the DTD" section)

...,

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of North for the benefit of Buford, because to do so would have allowed a programmer to model information, as taught by North in the section entitled "Developing the DTD" on p. 105. These references were all applicable to the same field of endeavor, i.e., browser updating.

Regarding claim 2, which is dependent upon claim 1,

Buford discloses:

characterized in that when a description element is defined ... as possibly having multiple occurrences, said table further comprises for said

description element an occurrence information for indicating that said description element may have multiple occurrences in an instance, and when an occurrence having a given rank is scanned during the encoding, the corresponding retrieved identification information is indexed with said rank. (Fig. 4 and p. 20 lines 15-28)

However, Buford does not explicitly disclose:

... in the schema ... ,

North, though, discloses:

...

... in the schema ... , (p.105 "Developing the DTD" section)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of North for the benefit of Buford, because to do so would have allowed a programmer to model information, as taught by North in the section entitled "Developing the DTD" on p. 105. These references were all applicable to the same field of endeavor, i.e., browser updating.

Regarding independent claim 3, Buford discloses:

A decoding method for decoding a fragment comprising a content and a sequence of identification information (Abstract), characterized in that it consists in:

using at least one table derived from a markup language ... (Abstract in context of p. 9 lines 20-21), ... defining a hierarchical structure of description elements comprising hierarchical levels, parent description elements and child description elements, said table containing identification information for solely identifying each description element in a hierarchical level (Abstract in context of p. 9 lines 19-24 and p. 11 line

19 – p. 12 line 4), and structural information for retrieving any child description element from its parent description element, (Abstract in context of p. 12 lines 5-16)

scanning said sequence identification information by identification information, (p. 20 lines 15-22)

at each step searching in said table for the description element associated to the current identification information and adding said description element to a hierarchical memory representation of an instance ... if not already contained in said hierarchical memory representation, (p. 18 line 22 – p. 19 line 7)

adding said content to the description element of said hierarchical memory representation that is associated to the last identification information of said sequence. (Abstract, p. 19 lines 3-7)

However, Buford does not explicitly disclose:

```
... schema, said schema ... ,
... ,
... of said schema ... ,
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North, though, discloses:

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... schema, said schema ... , (p.105 "Developing the DTD" section) ... , ... of said schema ... , (p.105 "Developing the DTD" section) ... .
```

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of North for the benefit of Buford, because to do so would have allowed a programmer to model information, as taught by North in the section entitled "Developing the DTD" on p. 105. These references were all applicable to the same field of endeavor, i.e., browser updating.

Application/Control Number: 09/982,269 Page 7

Art Unit: 2176

Regarding claim 4, which is dependent upon claim 3,

Buford discloses:

characterized in that when a description element is defined ... as possibly having multiple occurrences, said table further comprises for said description element an occurrence information for indicating that said description element may have multiple occurrences in an instance, and when said sequence comprises an indexed identification information, said index is interpreted as an occurrence rank for the associated description element, same description element(s) of lower rank(s) being added to said hierarchical memory representation if not already contained in it. (p. 20 lines 15-28)

However, Buford does not explicitly disclose:

... in the schema

North, though, discloses:

... in the schema ... (p.105 "Developing the DTD" section)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of North for the benefit of Buford, because to do so would have allowed a programmer to model information, as taught by North in the section entitled "Developing the DTD" on p. 105. These references were all applicable to the same field of endeavor, i.e., browser updating.

Regarding independent claim 5, Buford discloses:

An encoder for encoding a description element of an instance of a markup language schema defining a hierarchical structure of description elements, said

hierarchical structure comprising hierarchical levels, parent description elements and child description elements, said description element to be encoded comprising a content (p. 9 lines 17-20 and p. 11 lines 19-24), characterized in that it comprises:

a memory for storing at least one table ... (Fig. 1 #31, 37), said table containing identification information for solely identifying each description element in a hierarchical level, and structural information for retrieving any child description element from its parent description element (p. 9 lines 19-24 and p. 11 line 19 – p. 12 line 16),

computing means (Fig. 1 #26, 22, 24, 45, 47) for scanning said instance from parent description elements to child description elements until reaching the description element to be encoded, and retrieving the identification information of each scanned description element (Abstract and p. 9 lines 20-24), and for encoding said description element to be encoded as a fragment comprising said content and a sequence of the retrieved identification information. (Abstract and p. 9 lines 17-21)

However, Buford does not explicitly disclose:

... derived from said schema, ... ,

North, though, discloses:

... derived from said schema, ... , (p.105 "Developing the DTD" section)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of North for the benefit of Buford, because to do so would have allowed a programmer to model information, as taught by North in the section entitled "Developing the DTD" on p. 105. These references were all applicable to the same field of endeavor, i.e., browser updating.

Application/Control Number: 09/982,269

Art Unit: 2176

Page 9

Regarding independent claim 6, Buford discloses:

A decoder for decoding a fragment comprising a content and a sequence of identification information (Abstract), characterized in that the decoder comprises:

a memory for storing at least one table derived from a markup language schema (Fig. 1 #31, 37), said schema defining a hierarchical structure of description elements comprising hierarchical levels, parent description elements and child description elements, said table containing identification information for solely identifying each description element in a hierarchical level, and structural information for retrieving any child description element from its parent description element, (Abstract in context of p. 9 lines 19-24 and p. 11 line 19 – p. 12 line 16)

computing means for: (Fig. 1 #26, 22, 24, 45, 47)

scanning said sequence identification information by identification information (p. 20 lines 15-22), at each step searching in said table for the description element associated to the current identification information and adding said description element to a hierarchical memory representation of an instance ... if not already contained in said hierarchical memory representation, (p. 18 line 22 – p. 19 line 7)

adding said content to the description element of said hierarchical memory representation that is associated to the last identification information of said sequence. (Abstract, p. 19 lines 3-7)

However, Buford does not explicitly disclose:

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..., computing means for: ... of said schema ..., ....
```

North, though, discloses:

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..., computing means for:
... of said schema ..., (p.105 "Developing the DTD" section)
....
```

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of North for the benefit of Buford, because to do so would have allowed a programmer to model information, as taught by North in the section entitled "Developing the DTD" on p. 105. These references were all applicable to the same field of endeavor, i.e., browser updating.

Claim 7 is directed to a computer system for implementing the system of claim 5.

As such, this claim is substantially similar to claim 5, and therefore likewise rejected.

Claim 8 is directed to a computer system for implementing the system of claim 6.

As such, this claim is substantially similar to claim 6, and therefore likewise rejected.

Regarding independent claim 9, Buford discloses:

A data transmission system, the data transmission system includes a signal for transmission over a transmission network comprising an encoder and a decoder having a memory storing at least one table derived from markup language (Abstract, Fig. 1, p. 4 lines 1-21) ..., said markup language ... defining a hierarchical structure of description elements (Abstract in context p. 9 lines 20-21), said hierarchical structure comprising hierarchical levels, parent description elements and child description elements (Abstract in context of p. 9 lines 19-24 and p. 11 line 19 – p. 12 line 4), said table containing identification information for solely identifying each description element in a hierarchical level (Abstract in context of p. 9 lines 19-24 and p. 11 line 19 – p. 12 line 4), and structural information for retrieving any child description element from its parent description element, (p. 12 lines 5-16)

wherein said signal includes at least one fragment representing a content of an encoded description element (Abstract and p. 9 lines 17-21), and a sequence of identification information being associated in said table to said encoded description element and at least one parent description element (Abstract in context of p. 9 lines 19-24 and p. 11 line 19 – p. 12 line 16), wherein the sequence of identification information is usable by the decoder as a key to decode the encoded description element. (Abstract)

However, Buford does not explicitly disclose:

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... schema, ... schema ... ,
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North, though, discloses:

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... schema, ... schema ... , (p.105 "Developing the DTD" section)
```

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of North for the benefit of Buford, because to do so would have allowed a programmer to model information, as taught by North in the section entitled "Developing the DTD" on p. 105. These references were all applicable to the same field of endeavor, i.e., browser updating.

Regarding independent claim 10, Buford discloses:

A computer program product comprising a computer useable medium having computer readable program code embodied therein for reporting on performance of a plurality of parameters (Abstract), the program product comprising:

program code configured to implement a decoder having a table for updating a hierarchical memory representation of an instance of a markup language ... (Abstract in context of p. 9 lines 20-21), said markup

language ... defining a hierarchical structure of description elements (Abstract in context of p. 9 lines 20-21), said hierarchical structure comprising hierarchical levels, parent description elements and child description elements (Abstract in context of p. 9 lines 19-24 and p. 11 line 19 – p. 12 line 4), characterized in that the table is derived from said markup language ... (p. 11 line 19 – p. 12 line 4), and the table contains identification information for solely identifying each description element in a hierarchical level (Abstract in context of p. 9 lines 19-24 and p. 11 line 19 – p. 12 line 4), and structural information for retrieving any child description element from its parent description element. (p. 12 lines 5-16)

However, Buford does not explicitly disclose:

...
... schema, ... schema ... schema,

North, though, discloses:
...
... schema, ... schema ... schema, (p.105 "Developing the DTD" section)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of North for the benefit of Buford, because to do so would have allowed a programmer to model information, as taught by North in the section entitled "Developing the DTD" on p. 105. These references were all applicable to the same field of endeavor, i.e., browser updating.

Response to Arguments

8. Applicant's arguments have been fully considered but they are not persuasive. It is noted that Applicant's amendments have changed the scope of the claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Non-patent Literature

Liefke, Hartmut, et al., "An Extensible Compressor for XML Data", <u>SIGMOD Record</u>, Vol. 29, No. 1, Mar. 2000, pp. 57-62.

US Patent Application Publications

US Patents

Fuller et al	6,877,134
Chang et al	6,963,972
Krasinski	6,966,027

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M Stevens whose telephone number is (571) 272-4102. The examiner can normally be reached on M-F 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R. Herndon can be reached on (571) 272-4136. The current fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Additionally, the main number for Technology Center 2100 is (571) 272-2100.

Application/Control Number: 09/982,269

Art Unit: 2176

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Robert M. Stevens Reg. No. 47,972 Art Unit 2176

Date: December 10, 2005

rms

WILLIAM BASHORE
PRIMARY EXAMINER

Page 14

12/7/2005